

General VPDES Watershed
Permit for Total Nitrogen and
Total Phosphorus Discharges
and Nutrient Trading in the
Chesapeake Bay Watershed in
Virginia

**Public Hearing** 



### **Nutrient Trading Legislation** (Senate Bill 1275)

- Authorized Chesapeake Bay Watershed Nutrient Credit Exchange Program
- Directed DEQ to issue a watershed general permit for point source discharges of nutrients (Nitrogen and Phosphorus) to the Chesapeake Bay and its tributaries.
- Authorized creation of Virginia Nutrient Credit Exchange Association.
- On March 15, 2006, State Water Control Board approved commencement of public notification process for proposed regulation.

#### Nutrient trading permit

- The general permit will be issued to facilities in addition to the individual permit that the facilities are already required to hold.
- Regulation will take effect in the fall of 2006; permit will take effect 1/1/07.
- The general permit will supersede some conflicting or redundant conditions in the individual permits.

# **General Watershed Permit Regulation Contents**

- Permit eligibility requirements (unique in that all holders of individual VPDES permits are authorized to discharge under the permit, but significant dischargers and new/expanded facilities are REQUIRED to register for coverage, in addition to holding their existing permit)
- Registration requirements

#### Load limits

- Waste Load Allocations for existing significant dischargers, (Water Quality Management Plan Regulation)
- Permitted design capacity for expanding nonsignificant dischargers (what they've been discharging with technology installed to comply with non-nutrient limits in their current permits),
- Accounts for bubbling and regionalization
- Also accounts for net (pass-through) and bioavailability issues

- Schedule of compliance (the aggregate discharge of the significant dischargers in each tributary shall be reduced to the aggregate WLA from those facilities as soon as possible)
  - Current dates in permit are defaults
  - The Nutrient Credit Exchange Association is working with a consultant on an optimization model in order to determine the most cost-efficient facility upgrades
  - Information from this model will be provided to DEQ for consideration before final regulation is approved

- Compliance plans
  - May be submitted individually or through the Association
  - May opt to construct upgraded facilities or acquire credits
  - May opt out and operate with limits immediately (and would be immediately eligible to trade credits under this option)
- Monitoring and reporting requirements

- Methods of achieving compliance with annual load limits
  - -Mass of discharged nutrients is less than mass load limit in permit
  - -Sufficient credits are acquired from other permitted point source dischargers, to account for mass of discharged nutrients in excess of mass load limit

- -Payment to Water Quality Improvement Fund – last resort
  - » Only if no point source credits available in tributary where facility is located, AND if WQIF has credits to sell in tributary where facility is located
  - » Calculated from average unit reduction cost to POTWs in Virginia (prorated to 2011 estimate)
  - » ~\$11/lb for Nitrogen, ~\$5/lb for Phosphorus
  - » Price intended to not undercut the market and to encourage installation of upgraded nutrient removal technology

- Requirements for new and expanded facilities
  - Construction of treatment facilities
  - Offset of net increases in nutrient loads discharged:
    - » Acquisition of point source allocations
    - » Acquisition of non-point BMP loads (2:1 ratio of pounds reduced to pounds discharged)
    - » Payment to WQIF (unit cost = greater of unit cost of point source reduction or twice the unit cost of non-point BMP reduction in same tributary)
    - » Other options as approved by DEQ
- VPDES boilerplate.

#### **Trading Restrictions**

- Credits or offsets purchased from other facilities must be:
  - acquired for the purpose of achieving compliance in the same year in which the credits were generated,
  - generated in the same tributary,
  - acquired and certified to DEQ by June 1 of the following year.

Credit or offset purchases that would result in "hot spots" or exceedance of local water quality standards are not permitted!

#### Trading Restrictions (continued)

- Offset pounds acquired from non-point Best Management Practices (BMPs) must be:
  - Acquired through a public or private entity acting on behalf of the land owner;
  - Resulting from nutrient reductions beyond those already required by or funded under federal or state law, or the Virginia tributaries strategies plans;
  - Installed in the same tributary in which the new or expanded facility is located;
  - Included as conditions of the facility's individual Virginia Pollutant Discharge Elimination System permit;
  - Intended for use in the same year in which the BMP nutrient reductions will be achieved, and
  - Authenticated by February 1 of the year following the use of the offset pounds and certified to DEQ by June 1.

DEQ and DCR are currently developing the procedures by which the tributary strategy "baseline" may be fulfilled by individual landowners in order to be eligible to generate offset pounds. DEQ recognizes that BMP approval and tracking procedures must be in place for this program to be effective.

#### Public hearings

- May 23<sup>rd</sup>, 2:00 PM, Preston Library (VMI) (Lexington)
- May 24<sup>th</sup>, 2:00 PM, DEQ-NVRO (Woodbridge)
- June 6<sup>th</sup>, 2:00 PM, DEQ-TRO (Virginia Beach)
- June 12th, 3:00 PM, DEQ-PRO (Glen Allen)

#### **Next Steps**

- Public comment period ends June 30, 2006
- Inly 2006 to address response to comments received during comment period and to discuss issues related to implementation of general permit regulation
- Presentation of final regulation for approval at September 2006 SWCB meeting

#### Thanks for your time! If you have any additional questions/comments after this meeting, contact:

Kyle Ivar Winter, P.E.(804) 698-4182 or e-mail at

kiwinter@deq.virginia.gov

External Web page link:

http://www.deq.virginia.gov/vpdes/